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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/480,641

01/11/2000

Tom Steidel

RR-391-PCT/US-CON

4559

20427

7590

10/01/2004

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EXAMINER

KASSA, YOSEF

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/480,641

Applicant(s)

STEIDEL ET AL.

Examiner

YOSEF KASSA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Specification Objection

1. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).
2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 1-15, the phrase "for example" (e.g.) in claim 1, line 1, in claim 2, line 3, and in claim 8, line 1, renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Objections

4. Claim 7 is objected to because of the following informalities: punctuation (period) is missing at the end the sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzmorris et al (U.S. Patent 4,691,231).

With regarding to claim 1, Fitzmorris et al disclose method for detecting containers, e.g., bottles of glass or plastic, or cans made of metal, wood, glass or plastic, which are transported in a lying position and with their axis parallel to the

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direction of transport past a detection zone associated with a detector station containing a video camera, a video image analysis of the container being carried out, characterized by (see col. 4, lines 54-65):

analyzing a sequence of video images, i.e., six different video scan images, of the container whilst it is conveyed past the video camera (see col. 5, lines 34-39 and col. 4, lines 55-60), determining the position, i.e., top/bottom inspection, and movement of the container, i.e., bottle delivered, in a viewing region of the video camera on the basis of continuous detection of the position and movement of the container in the video image (see col. 5, lines 5-23), and determining the most suitable video image, i.e., clear, clean and empty bottle, for recognition and identification of the container (see col. 5, lines 16-26).

Fitzmorris et al does not disclose expressly for the recycling of materials or reuse of the container. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recycling of materials or reuse of the container. Applicant has not disclosed that recycling of materials or reuse of the container provide an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the above process taught by Fitzmorris et al or the claimed above values because both process perform the same function, that is, detecting moving containers.

Therefore, it would have been obvious to combine to on one ordinary skill in this art to modify Fitzmorris et al with to obtain the invention as specified in claims 1.

With regarding to claim 2, Fitzmorris et al disclose further step of calculating on the basis of the video picture of the container a characteristic expression of the shape of the container, e.g., contour, surface area in the video image, cross-section (see col. 5, lines 48-52).

With regarding to claim 3, Fitzmorris et al disclose by producing a colour video image of a container which is a bottle of plastic or glass (see 5, lines 47-52), and determining the colour of the container in the video image based on the bottle's light transmissivity for light which is emitted in a cluster of wave lengths (see col. 5, lines 28-35).

With regarding to claims 5, Fitzmorris et al disclose by observing any longitudinal markings in the video image of a container which is a bottle, emitting a signal indicating that the container wholly or partly contains liquid or another substance, and possibly returning the container to the user for emptying prior to reinsertion (see col. 15-23).

With regarding to claim 7, Fitzmorris et al disclose in that in addition it is analysed whether the container is of a specific metal type (see col. 7, lines 19-26).

Claim 8 is similarly analyzed as claim 1, except claim 8 is a device claim.

Claim 9 is similarly analyzed as claims 2.

Claim 10 is similarly analyzed as claim 3.

Claim 12 is similarly analyzed as claim 5.

Claim 14 is similarly analyzed as claim 7.

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6. Claims 4, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzmorris et al (U.S. Patent 4,691,231), further in view of Kitamura et al (U.S. Patent 5,569,752).

With regarding to claims 4 and 11, while Fitzmorris et al disclose scanning a field of the video image of the container to search, He is silent about register a bar code located on the container. However, at the same field of endeavor, Kitamura et al discloses this feature (see col. 6, lines 12-18). At the time of invention was made, it would have been obvious to an ordinary skill in the art to incorporate the teaching of Kitamura et al bar code reading process into Fitzmorris et al system. The motivation doing so is to read a bar code image and forward the image to computer.

Claim 15 is similarly analyzed as claim 4.

7. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzmorris et al (U.S. Patent 4,691,231), Kitamura et al (U.S. Patent 5,569,752), and further in view of Kohashi (U.S. patent 4,972,882).

With regarding to claims 6 and 13, while Fitzmorris et al disclose capacitance measurement, i.e., fill level and empty inspection, he is silent about container is weighed. However, at the same field of endeavor, Kohashi discloses this feature (see col. 3, lines 20-38). At the time of invention was made, it would have been obvious to an ordinary skill in the art to incorporate the teaching of Kohashi's container weigh process into Fitzmorris et al system. The motivation doing so is to provide a device for storing measured weights value of container.

Other Prior Art Cited

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (5,443,164) to Walsh et al discloses plastic container sorting system and method.

US Patent No. (5,193,630) to Cane discloses device particularly suitable for...

US Patent No. (5,007,096) to Yoshida discloses object inspection apparatus.

US Patent No. (4,586,080) to Hoyt et al discloses method and apparatus for video inspection of articles manufacture.

US Patent No. (4,486,776) to Yoshida discloses inspection apparatus.

US Patent No. (4,414,566) to Peyton et al discloses sorting and inspection apparatus and method.

US Patent No. (4,025,201) to deane discloses method and apparatus for video inspection of articles manufacture...

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone

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numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and (703) 872-9306 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

PATENT EXAMINER

Yosef Kassa

09/28/04.

A handwritten signature in black ink, appearing to read 'Yosef Kassa', is written over the printed name.